

Please cancel claims 67-75 without prejudice.

### RE MARKS

Reexamination and reconsideration of the above-identified application are hereby requested. In the present Office Action, the Examiner imposed a restriction requirement relative to four groups of claims. Applicant hereby elects Group I, namely, claims 41-44 and 57-66. Consistent with this election, claims 67-75 have been cancelled. This election is hereby made with traverse.

Also, in the previously filed Amendment A, claim 66 was re-written in independent form in response to the Examiner's prior indication that claim 66 was objected to but contained allowable subject matter. In the Final Office Action, claim 66 in independent form was rejected in view of Suemura et al. A review of the amended claim 66 indicated that one of the limitation had not been replicated in claim 66 when it was rewritten in independent form. It is proposed to amend claim 66 a second time including the missing limitation from claim 42. It is believed that claim 66 is now allowable for the same reasons that the Examiner objected to claim 66 in the initial Office Action. Since the amended version of claim 66 is the same as the original version of claim 66 (which was searched and which contained allowable subject matter), the present amendment to claim 66 will not require an additional search.

It is also submitted that the Examiner's rejection of claim 41 as obvious and unpatentable over Suemura has failed to properly address at least one of the limitations therein, as well as in each of the dependent claims thereto, and for the following reasons, claim 41 and its dependent claims should be allowable.

Claim 41 requires that:

"a separate signal path couples each input line to a respective output line of each module."

In addressing this limitation in claim 41, the Examiner appears to be proposing a modification of Suemura's module 123 in view of a portion of Fig. 11 thereof. However, the Examiner has failed to point to any suggestion, motivation or teaching as to why one of ordinary skill in the art would modify Suemura et al as suggested so as to make claim 41 and its dependent claims obvious.

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It is not enough when attempting to establish a prima facie case of obviousness to simply point to disparate structures in a disclosure or a prior art document as a rationale for a conclusion of obviousness. As required by the MPEP, page 2100-124, 125 (8<sup>th</sup> Edition, Rev. No. 1):

"First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings ... Finally, the prior art reference ... must teach or suggest all of the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, not in the applicant's disclosure."

In rejecting claim 41, the Examiner switched from a discussion of the structure of module 123 of Fig. 8, page 4 of the Office Action, to a reference to Fig. 11 "item 135 input/output represent a separate signal path that couples each input line to a respective output line of each module", top of page 5 of the Office Action. The required suggestion or teaching to modify Suemura et al in accordance with the limitation of claim 41 has not been articulated. In fact, one of skill in the art would not make the modification proposed by the Examiner.

The structure of module 123 of Suemura et al is a splitter-multiplexer as illustrated in Fig. 9 of Suemura et al. This structure in fact combines signals in various ways and clearly does not meet the above quoted limitation from claim 41. The structures 135 noted by the Examiner of Fig. 11 are each, according to Suemura et al, a 4-input and 1-output space division optical switch. These are designated by the reference numerals 135(0), 135(4), 135(8), 135(12), and so forth." (Col. 13, lines 25-29, Suemura et al).

Thus, the structure noted by the Examiner "item 135" is in fact a 4-1 multiplexer. One of four inputs can be selected and coupled to a single output. Such structures are clearly quite different from and have a different structure than the above-quoted limitation from claim 41.

It is submitted that the structure of module 123 noted by the Examiner at the bottom of page 4 of the Office Action and item 135 noted at the top of page 5 of the Office Action represent

a teaching away from the above quoted limitation. In addition to the missing motivation, suggestion or teaching, these structures would lead one away from and not toward the claimed structure.

It appears that the present rejection of claim 41, and its dependent claims, does not comport with the requirements of the MPEP to establish a prima facie case of obviousness where "all the claim limitations must be taught or suggested by the prior art" (MPEP, page 2100-128, Section 2143.03).

The Examiner then went on on page 5 to further argue the obviousness of claim 41 which requires:

" $K^2$  input lines, where  $K$  less than  $N1$  and coupled them to  $K^2$  output lines".

In further arguing obviousness, the Examiner again referred to Fig. 11 of Suemura et al but once again failed to address the fact that the above quoted limitation is one element of a combination which imposes further requirements, as discussed above, namely:

"a separate signal path couples each input line to a respective output of each module."

It is submitted that the Examiner's "design choice" rationale referred to on page 5 of the Office Action, merely addresses a change in a size of the structure of Fig. 11, which is a completely different structure than claimed. Once again no suggestion, motivation or teaching is identified as to why a structure such as module 123 would be modified in accordance with the structure of Fig. 11 by one of skill in the art so as to make claim 41 obvious. There is no articulated suggestion, teaching or motivation.

The only motivation noted by the Examiner had to do with modifying the size of various aspects of Fig. 11 and did not take into account or consider the previously noted structure in the rejection, namely, module 123. As noted above, module 123 has a fundamentally different structure than claimed and in fact teaches away from the claimed structure.

For all of the above reasons, it is believed that claim 41 as amended and the associated dependent claims are allowable over Suemura et al for at least the above reasons.

Applicants' attorney would like an opportunity to discuss the Office Action, and this amendment, with the Examiner in a telephone interview. He will contact the Examiner shortly in connection with this application.

Allowance of the application is respectfully requested.

A marked copy of amended claim 66 is attached hereto.

Respectfully submitted,

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**Marked Copy Of Amended Claim**

66. (Twice Amended) A signal coupling network for coupling any one of N1 inputs to any one of N2 outputs comprising:

a plurality of substantially identical, KxK signal interconnect modules wherein each contains K<sup>2</sup> input lines, where K<N1, and couples them to K<sup>2</sup> output lines;

wherein N1 inputs comprise  $\frac{N1}{K}$  groups of signal carriers coupled to a corresponding number of KxK modules; and.

wherein the plurality comprises  $\frac{\left(\frac{N1}{K} \times \frac{N2}{K}\right)}{1}$  modules.